

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-10. (canceled)

11. (currently amended) A semiconductor device comprising a heat-radiative support plate;

 a first semiconductor stack which has first and second semiconductor elements layered and mounted in turn on said support plate;

 a second semiconductor stack which has third and fourth semiconductor elements layered and mounted in turn on said support plate; and

a control circuit for controlling the switching operation of said first to fourth semiconductor elements so that said first and fourth semiconductor elements and said second and third semiconductor elements are alternately switched, and thereby when one of said first and second semiconductor elements and one of said third and fourth semiconductor elements are turned on together, the other of said first and second semiconductor elements and the other of said third and fourth semiconductor elements is turned off together;

wherein said first and second semiconductor elements of the first semiconductor stack and said third and fourth semiconductor elements of the second semiconductor stack said first to fourth semiconductor elements contribute to form a H-

type bridge circuit;

each of said first to fourth semiconductor elements is a switching element;

said first and second semiconductor elements are electrically connected to each other; and

said third and fourth semiconductor elements are electrically connected to each other

~~when one of said first and second semiconductor elements and one of said third and fourth semiconductor elements are turned on together, the other of said first and second semiconductor elements and the other of said third and fourth semiconductor elements is turned off together, said first and fourth semiconductor elements and said second and third semiconductor elements are alternately switched.~~

12. (previously presented) The semiconductor device of claim 11, wherein one of said first and second semiconductor elements in the first semiconductor stack and one of third and fourth semiconductor elements in the second semiconductor stack form a switch of high voltage side in the H-type bridge circuit; and

the other of said first and second semiconductor elements in the first semiconductor stack and the other of third and fourth semiconductor elements in the second semiconductor stack form another switch of low voltage side in the H-type bridge circuit.

13. (previously presented) The semiconductor device of claim 11 or 12, wherein a first electric current flows through said first and fourth semiconductor elements and said support plate when

said first and fourth semiconductor elements are turned on;
 a second electric current flows through said second and
 third semiconductor elements and said support plate when said
 second and third semiconductor elements are turned on; and
 said first and second electric currents alternately flow
 through an electric load.

14-16. (canceled).

17. (new) The semiconductor device of claim 11, wherein said
 control circuit is mounted on said support plate between said
 first and second semiconductor stacks.

18. (new) The semiconductor device of claim 11, further
 comprising a first electrically conductive and radiating layer
 mounted between said first and second semiconductor elements;
 and a second electrically conductive and radiating layer mounted
 between said third and fourth semiconductor elements;

 wherein an upper electrode of said first semiconductor
 element and a lower electrode of said second semiconductor
 element are electrically connected to each other through said
 first radiating layer;

 an upper electrode of said third semiconductor element and
 a lower electrode of said fourth semiconductor element are
 electrically connected to each other through said second
 radiating layer;

 each upper electrode of said second and fourth
 semiconductor elements and an upper electrode of said control
 element are electrically connected to each other through lead

wires; and

each lower electrode of said first and third semiconductor elements are electrically connected to each other through said support plate.

19. (new) A semiconductor device comprising a heat-radiative support plate;

a first semiconductor stack which has first and second semiconductor elements layered and mounted in turn on said support plate;

a second semiconductor stack which has third and fourth semiconductor elements layered and mounted in turn on said support plate; and

a control circuit mounted on said support plate between said first and second semiconductor stacks for controlling the switching operation of said first to fourth semiconductor elements.

20. (new) The semiconductor device of claim 19, wherein said first and third semiconductor elements are disposed away from each other a longer distance than a size of said first semiconductor element.

21. (new) The semiconductor device of claim 19, wherein said first semiconductor stack is mounted on said support plate near one side surface thereof; and

said second semiconductor stack is mounted on said support plate near the other side surface thereof.

22. (new) The semiconductor device of claim 19, wherein said control circuit controls the switching operation of said first to fourth semiconductor elements.

23. (new) A semiconductor device comprising a heat-radiative support plate;

a first semiconductor stack which has first and second semiconductor elements layered and mounted in turn on said support plate;

a second semiconductor stack which has third and fourth semiconductor elements layered and mounted in turn on said support plate; and

a plurality of lead terminals connected to said support plate;

wherein said support plate has side surfaces in parallel to the arranged direction of said lead terminals; and

said lead terminals are connected to each outside of said side surfaces of said support plate away from said first and second semiconductor stacks.

24. (new) The semiconductor device of claim 23, wherein said lead terminals are connected to said side surfaces of said support plate near opposite ends of each side surface.

25. (new) The semiconductor device of claim 23, wherein said side surfaces of said support plate comprises opposed one and the other side surfaces; and

said lead terminals are connected to said one and the other side surfaces respectively.

26. (new) The semiconductor device of claim 23, further comprising a control circuit mounted on said support plate between said first and second semiconductor stacks for controlling the switching operation of said first to fourth semiconductor elements.